

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of forming a crystalline film, comprising:
setting a substrate in a chamber, the substrate having a thin film on a surface of the substrate, a portion of ~~the~~ a wall of the chamber being projected in a direction ~~apart~~ orthogonally outward from the substrate, a window being provided at a top ~~of the~~ surface of ~~the thin film~~ projected portion of the wall, the chamber extending along at least one direction parallel to the surface of the substrate, the projected portion of the wall being above the top of the chamber;

applying energy through the window to a surface layer of the thin film;

melting at least the surface layer of the thin film under a mixed gaseous atmosphere by the applied energy; and

crystallizing at least the surface layer of the thin film.

2. (Previously Presented) The method of forming a crystalline film according Claim 1, wherein the thin film is a semiconductor thin film.

3. (Cancelled)

4. (Previously Presented) The method of forming a crystalline film according to Claim 1, wherein the energy is applied to the thin film to crystallize it under atmospheric pressure.

5. (Previously Presented) The method of forming a crystalline film according to Claim 1, wherein at least the surface layer of the thin film is melted and crystallized in a mixed gaseous atmosphere that contains an inert gas and hydrogen molecules.

6. (Previously Presented) The method of forming a crystalline film according to Claim 4, wherein the mixed gaseous atmosphere contains an inert gas and a hydrogen halide.

7. (Previously Presented) The method of forming a crystalline film according to Claim 6, wherein the inert gas is a rare gas.

8. (Previously Presented) The method of forming a crystalline film according to Claim 7, wherein the rare gas is argon.

9. (Previously Presented) The method of forming a crystalline film according to Claim 8, wherein at least the surface of the thin film is melted by supplying high energy to the thin film.

10. (Previously Presented) The method of forming a crystalline film according to Claim 9, wherein the form of the high energy is light.

11. (Previously Presented) The method of forming a crystalline film according to Claim 9, wherein the form of the high energy is a laser beam.

12. (Currently Amended) ~~The~~ A method of forming a crystalline film, comprising:

setting a substrate in a chamber, the substrate having a thin film on a surface of the substrate, a window being provided near a side wall of the chamber, the window being disposed orthogonally outward from the surface of the substrate above a top of the chamber, the chamber extending along at least one direction parallel to the surface of the substrate;

applying energy through the window to a surface layer of the thin film with a normal direction of the thin film shifted by an angle from a direction of an irradiation path;

melting at least the surface layer of the thin film under a mixed gaseous atmosphere by the applied energy; and

crystallizing at least the surface layer of the thin film.

13. (Previously Presented) The method of forming a crystalline film according to Claim 12, wherein the energy is applied to the thin film to crystallize it under atmospheric pressure.

14. (Previously Presented) The method of forming a crystalline film according to Claim 12, further comprising:

discharging evaporated elements and scattered fine powder from an exhaust port, the exhaust port being provided at a position directly above the substrate.

15. (Previously Presented) The method of forming a crystalline film according to Claim 12, wherein the thin film is a semiconductor thin film.

16. (Previously Presented) The method of forming a crystalline film according to Claim 68, wherein at least the surface of the thin film is melted by supplying high energy to the thin film.

17. (Previously Presented) The method of forming a crystalline film according to Claim 16, wherein the form of the high energy is light.

18. (Previously Presented) The method of forming a crystalline film according to Claim 16, wherein the form of the high energy is a laser beam.

19-63. (Cancelled)

64. (Previously Presented) The method of forming a crystalline film according to Claim 1, wherein the mixed gaseous atmosphere contains a hydrogen-containing gas and an inert gas.

65. (Previously Presented) The method of forming a crystalline film according to Claim 12, wherein at least the surface layer of the thin film is melted and crystallized in a mixed gaseous atmosphere that contains an inert gas and hydrogen molecules.

66. (Previously Presented) The method of forming a crystalline film according to Claim 12, wherein the mixed gaseous atmosphere contains an inert gas and a hydrogen halide.

67. (Previously Presented) The method of forming a crystalline film according to Claim 66, wherein the inert gas is a rare gas.

68. (Previously Presented) The method of forming a crystalline film according to Claim 67, wherein the rare gas is argon.

69. (Previously Presented) The method of forming a crystalline film according to Claim 12, wherein a part of the energy enters the thin film, and another part of the energy is reflected from the thin film along a reflection path in the chamber, and course changing means changes a course of reflected energy to irradiate the thin film again with the reflected energy.